

IN THE CLAIMS:

Please amend the claims as follows:

1. (currently amended) A method ~~supporting a switch from a point-to-multipoint channel to a point-to-point channel for transmitting multicast data from a mobile communication network to a mobile station, said method comprising~~ at a mobile station:

~~said mobile station~~ determining a link quality of a point-to-multipoint channel based on link quality related measurements on said point-to-multipoint channel, which point-to-multipoint channel is currently used by a said mobile communication network for transmitting multicast data; and
~~said mobile station~~ requesting from said mobile communication network the transmission of said multicast data via a point-to-point channel, in case said determined link quality lies below a given link quality.
2. (original) A method according to claim 1, further comprising said network establishing a point-to-point channel to said mobile station upon receiving such a request to transmit said multicast data via a point-to-point channel and transmitting said multicast data via said established point-to-point channel.
3. (original) A method according to claim 1, wherein said determined link quality of said point-to-multipoint channel is represented at least by a determined mean bit error probability, wherein said given link quality is represented at least by a given maximum bit error probability, and wherein said determined link quality is assumed to lie below said given link quality in case said determined mean bit error probability lies above said given maximum bit error probability.
4. (original) A method according to claim 1, wherein said determined link quality of said point-to-multipoint channel is represented at least by a determined coefficient of variation of a bit error probability, wherein said given link quality is represented at least by a given minimum coefficient of variation of a bit error

probability, and wherein said link quality is assumed to lie below said given link quality in case said determined coefficient of variation of a bit error probability lies below said given minimum coefficient of variation of a bit error probability.

5. (original) A method according to claim 1, further comprising said network providing an indication of said given link quality to said mobile station.
6. (original) A method according to claim 5, wherein said network provides an indication of said given link quality to said mobile station for each multicast service for which multicast data is to be transmitted to said mobile station.
7. (original) A method according to claim 1, wherein in case said mobile station receives multicast data for at least two multicast services via said point-to-multipoint channel, a given link quality is available for each of said multicast services at said mobile station, and said mobile station requests from said mobile communication network the transmission of said multicast data via a point-to-point channel in case said determined link quality lies below the highest of said given link qualities.
8. (original) A method according to claim 1, further comprising for supporting a switch from a point-to-point channel to a point-to-multipoint channel for transmitting multicast data from a mobile communication network to a mobile station:

said mobile communication network estimating a link quality of a point-to-multipoint channel while transmitting multicast data on a point-to-point channel to said mobile station; and

in case said estimated link quality of said point-to-multipoint channel reaches a required link quality, said mobile communication network ordering said mobile station to switch from said point-to-point channel to said point-to-multipoint channel for receiving said multicast data.

9. (original) A method according to claim 8, further comprising preventing a repeated switching between a point-to-point channel and a point-to-multipoint channel for a transmission of multicast data belonging a single session of a multicast service, as long as said mobile station remains within one cell served by said mobile communication network.
10. (currently amended) An apparatus ~~mobile station~~ comprising:
 - a measuring portion configured for performing link quality related measurements on a point-to-multipoint channel via which said apparatus ~~mobile station~~ receives multicast data from a mobile communication network;
 - a processing portion configured for determining a link quality of a point-to-multipoint channel based on measurement results provided by said measuring portion and for comparing a determined link quality with a given link quality; and
 - a transmitting portion configured for transmitting a request to a mobile communication network to transmit multicast data via a point-to-point channel, in case said processing portion detects that a determined link quality of a point-to-multipoint channel employed for transmitting said multicast data lies below a given link quality.
11. (currently amended) An apparatus for ~~sub-network of a~~ mobile communication network, said apparatus, ~~said sub-network~~ comprising:
 - a receiving portion configured for receiving from a mobile station a request to switch from using a point-to-multipoint channel to using a point-to-point channel for transmitting multicast data to said mobile station; and
 - a processing portion configured for switching upon such a request received by said receiving portion from using a point-to-multipoint channel to using a point-to-point channel for transmitting multicast data to said mobile station.
12. (currently amended) A mobile communication system comprising an apparatus according to claim 10 ~~mobile station~~ and a sub-network of a mobile communication network.

~~said mobile station including:~~

~~a measuring portion for performing link quality related measurements on a point to multipoint channel via which said mobile station receives multicast data from said sub-network;~~

~~a processing portion for determining a link quality of a point to multipoint channel based on measurement results provided by said measuring portion and for comparing a determined link quality with a given link quality; and~~

~~a transmitting portion for transmitting a request to said sub-network to transmit multicast data via a point to point channel, in case said processing portion detects that a determined link quality of a point to multipoint channel employed for transmitting said multicast data lies below a given link quality;~~

~~and said sub-network including:~~

~~a receiving portion for receiving from said mobile station a request to switch from using a point to multipoint channel to using a point to point channel for transmitting multicast data to said mobile station; and~~

~~a processing portion for switching upon such a request received by said receiving portion from using a point to multipoint channel to using a point to point channel for transmitting multicast data to said mobile station.~~

13. (currently amended) A ~~software program product~~computer readable medium in which a software code for supporting ~~a switch from a point to multipoint channel to a point to point channel for transmitting multicast data from a mobile communication network to a mobile station is stored~~, said software code realizing the method of claim 1 ~~following steps when running in a processing component of a mobile station:~~

~~determining a link quality of a point to multipoint channel based on link quality related measurements on said point to multipoint channel, which point to multipoint channel is currently used by said mobile communication network for transmitting multicast data; and~~

~~causing a request to said mobile communication network to transmit said multicast data via a point to point channel, in case said determined link quality lies below a given link quality.~~

14. (currently amended) A method ~~supporting a switch from a point-to-point channel to a point-to-multipoint channel for transmitting multicast data from a mobile communication network to a mobile station, said method comprising at a~~ mobile communication network:
- ~~said mobile communication network~~ estimating a link quality of a point-to-multipoint channel while transmitting multicast data on a point-to-point channel to a ~~said~~ mobile station; and
- in case said estimated link quality of said point-to-multipoint channel reaches a required link quality, ~~said mobile communication network~~ ordering said mobile station to switch from said point-to-point channel to said point-to-multipoint channel for receiving said multicast data.
15. (currently amended) A method according to claim 14 precedingly comprising ~~as a preceding step~~:
- said mobile station performing link quality related measurements on said point-to-point channel, which point-to-point channel is currently used for transmitting multicast data to said mobile station, and transmitting measurement results to said mobile communication network,
- wherein said mobile communication network estimates said link quality of said point-to-multipoint channel based on said measurement results for said point-to-point channel.
16. (original) A method according to claim 15, wherein said mobile station transmits said measurement results to said mobile communication network upon a request from said mobile communication network.
17. (original) A method according to claim 14, wherein said mobile communication network orders said mobile station to switch from said point-to-point channel to said point-to-multipoint channel for receiving said multicast data by means of a switch order, which switch order releases said point-to-point connection and provides parameters for said point-to-multipoint channel to said mobile station.

18. (currently amended) A method according to claim 14, wherein in case said mobile station receives from said mobile communication network multicast data of at least two multicast services via at least two point-to-point channels, each multicast service requiring a dedicated link quality, said mobile communication network station-switches from said point-to-point channels to a point-to-multipoint channel for transmitting said multicast data only, in case the highest required link quality of all multicast services is reached.
19. (currently amended) An apparatus for ~~sub-network of a mobile communication network, said apparatus, said sub-network~~ comprising:
a transmitting portion configured for transmitting multicast data using at least one of a point-to-point channel and a point-to-multipoint channel; and
a processing portion configured for estimating the link quality of a point-to-multipoint channel while said transmitting portion uses a point-to-point channel for transmitting multicast data to a mobile station, and for ordering said mobile station to switch from said point-to-point channel to said point-to-multipoint channel for receiving said multicast data, in case said estimated link quality lies above a required link quality.
20. (currently amended) A mobile communication system comprising a mobile station and an apparatus according to claim 19, ~~a sub-network of a mobile communication network,~~
said mobile station including:
a receiving portion for receiving multicast data from said mobile communication network; and
~~said sub-network including:~~
~~a transmitting portion for transmitting multicast data using at least one of a point-to-point channel and a point-to-multipoint channel; and~~
~~a processing portion for estimating the link quality of a point-to-multipoint channel while said transmitting portion uses a point-to-point channel for transmitting multicast data to a mobile station, and for ordering said mobile~~

~~station to switch from said point to point channel to said point to multipoint channel for receiving said multicast data, in case said estimated link quality lies above a required link quality.~~

21. (currently amended) A mobile communication system according to claim 20, wherein said mobile station further includes:
- a measuring portion configured for performing link quality related measurements on a point-to-point channel via which said mobile station receives multicast data from said sub-network; and
 - a transmitting portion configured for transmitting measurement results of said measuring portion to said sub-network, and
- wherein said sub-network further includes:
- a receiving portion configured for receiving from said mobile station measurement results on the link quality of a point-to-point channel employed by said sub-network for transmitting multicast data to said mobile station, said processing portion configured for estimating said link quality of said point-to-multipoint channel from measurement results received by said receiving portion from a mobile station.
22. (currently amended) A ~~software program product~~computer readable medium in which a software code ~~for supporting a switch from a point to point channel to a point to multipoint channel for transmitting multicast data from a mobile communication network to a mobile station~~ is stored, said software code realizing the method of claim 14 ~~following steps~~ when running in a processing component of a mobile communication network, ~~:~~
- ~~estimating a link quality of a point to multipoint channel while said mobile communication network is transmitting multicast data on a point to point channel to said mobile station; and~~
 - ~~in case said estimated link quality of said point to multipoint channel reaches a required link quality, causing an order to said mobile station to switch from said point to point channel to said point to multipoint channel for receiving said multicast data.~~

23. (new) The apparatus according to claim 10, wherein said apparatus is a mobile station or a part of a mobile station.
24. (new) The apparatus according to claim 11, wherein said apparatus is a sub-network of a mobile communication network or a part of a sub-network of a mobile communication network.
25. (new) The apparatus according to claim 19, wherein said apparatus is a sub-network of a mobile communication network or a part of a sub-network of a mobile communication network.
26. (new) A method comprising at a sub-network of a mobile communication network:
 - receiving from a mobile station a request to switch from using a point-to-multipoint channel to using a point-to-point channel for transmitting multicast data to said mobile station; and
 - switching upon such a request received by said receiving portion from using a point-to-multipoint channel to using a point-to-point channel for transmitting multicast data to said mobile station.
27. (new) An apparatus comprising:
 - means for performing link quality related measurements on a point-to-multipoint channel via which said apparatus receives multicast data from a mobile communication network;
 - means for determining a link quality of a point-to-multipoint channel based on measurement results provided by said measuring portion and for comparing a determined link quality with a given link quality; and
 - means for transmitting a request to a mobile communication network to transmit multicast data via a point-to-point channel, in case said processing portion detects that a determined link quality of a point-to-multipoint channel employed for transmitting said multicast data lies below a given link quality.

28. (new) An apparatus for a mobile communication network, said apparatus comprising:
- means for receiving from a mobile station a request to switch from using a point-to-multipoint channel to using a point-to-point channel for transmitting multicast data to said mobile station; and
 - means for switching upon such a request received by said receiving portion from using a point-to-multipoint channel to using a point-to-point channel for transmitting multicast data to said mobile station.
29. (new) An apparatus for a mobile communication network, said apparatus comprising:
- means for transmitting multicast data using at least one of a point-to-point channel and a point-to-multipoint channel; and
 - means for estimating the link quality of a point-to-multipoint channel while said transmitting portion uses a point-to-point channel for transmitting multicast data to a mobile station, and for ordering said mobile station to switch from said point-to-point channel to said point-to-multipoint channel for receiving said multicast data, in case said estimated link quality lies above a required link quality.
30. (new) The apparatus according to claim 10, wherein said determined link quality of said point-to-multipoint channel is represented at least by a determined mean bit error probability, wherein said given link quality is represented at least by a given maximum bit error probability, and wherein said processing portion is configured to assume a link quality to lie below said given link quality in case said determined mean bit error probability lies above said given maximum bit error probability.
31. (new) The apparatus according to claim 10, wherein said determined link quality of said point-to-multipoint channel is represented at least by a determined coefficient of variation of a bit error probability, wherein said given

link quality is represented at least by a given minimum coefficient of variation of a bit error probability, and wherein said processing portion is configured to assume a link quality to lie below said given link quality in case said determined coefficient of variation of a bit error probability lies below said given minimum coefficient of variation of a bit error probability.

32. (new) The apparatus according to claim 10, wherein in case said apparatus receives multicast data for at least two multicast services via said point-to-multipoint channel, a given link quality is available for each of said multicast services, and wherein said transmitting portion is configured to transmit a request to said mobile communication network to transmit said multicast data via a point-to-point channel in case said determined link quality lies below the highest of said given link qualities.
33. (new) The apparatus according to claim 19, wherein for the case that said mobile station receives from said mobile communication network multicast data of at least two multicast services via at least two point-to-point channels, each multicast service requiring a dedicated link quality, said processing portion is configured to cause said transmitting portion to switch from said point-to-point channels to a point-to-multipoint channel for transmitting said multicast data only, in case the highest required link quality of all multicast services is reached.